

What is claimed is:

Sub
D1

5 ~~1. A continuous method of providing individual sheets from a web having opposed, first and second edges and a substantially infinite length, comprising the following steps:~~

a) forming a line of weakness comprising perforations and scores extending substantially from the first edge to the second edge; and

10 b) applying a force substantially parallel to the length of the web sufficient to separate an individual sheet from the web at the line of weakness.

15 2. The method of claim 1 wherein the step of forming the line of weakness comprises applying laser energy to the web.

20 3. The method of claim 1 wherein the step of forming the line of weakness comprises applying ultrasonic energy to the web.

25 4. The method of claim 1 wherein the step of forming the line of weakness comprises passing the web through a nip between a knife and knife abutting means.

5. The method of claim 1 wherein the web comprises ~~polymeric film.~~

6. The method of claim 5 wherein the polymeric film has apertures formed therein.

5 7. The method of claim 1 wherein the line of weakness is substantially perpendicular to the length of the web.

10 8. A continuous method of providing individual sheets from a web having opposed, first and second edges and a substantially infinite length, comprising the following steps:

15 a) providing a knife and a knife abutting means, both having a web contacting surface, wherein at least one of the knife and abutting means web contacting surfaces comprises a plurality of surface continuities and a plurality of surface discontinuities having a depth and a lateral width;

20 b) positioning a first portion of the web in a nip between the web contacting surfaces, wherein a second portion of the web extending beyond the contacting surfaces defines an individual sheet;

25 c) converging the knife and the knife abutting means, thereby perforating the web in regions corresponding to the surface continuities and scoring the material in regions corresponding to the surface discontinuities; and

d) applying a force substantially parallel to the length of the web sufficient to separate the individual sheet from the web at the line of weakness.

5
9. The method of claim 8 wherein the discontinuities provide a total depth of less than about 95% of the material's thickness.

10
10. The method of claim 8 wherein the discontinuities provide a total depth of about 10% to about 75% of the web's thickness.

15
11. The method of claim 8 wherein the web comprises polymeric film.

12. The method of claim 8 wherein the polymeric film has apertures formed therein.

20
13. The method of claim 8 wherein the discontinuities comprise grooves.

14. The method of claim 8 wherein the abutting means comprises a cylindrical anvil.

25
15. The method of claim 8 wherein the lateral width of the discontinuities is about 0.5 mm to about 6 mm.

16. The method of claim 8 wherein the discontinuities are randomly spaced.

17. The method of claim 8 wherein the discontinuities are uniformly spaced.

18. The method of claim 8 wherein the width of the discontinuities vary.

19. The method of claim 8 wherein the width of the discontinuities is greater at the web contacting surface than the width of the discontinuities distal to the web contacting surface.

20. The method of claim 8 wherein the width of the discontinuities at the web contacting surface is substantially equal to the width of the discontinuities distal to the web contacting surface.

21. A method for the manufacture of a tampon comprising the steps of:

a) unwinding a web of liquid-permeable, thermoplastic apertured film, the web having opposed first and second edges and a substantially infinite length;

20

25

b) forming a line of weakness comprising perforations and scores extending substantially from the first edge to the second edge;

c) applying a force substantially parallel to the length of the web sufficient to separate an individual sheet from the web at the line of weakness;

d) positioning the individual sheet over an absorbent sliver;

e) attaching the individual sheet to the absorbent sliver;

f) forming the absorbent sliver into a tampon blank; and

g) compressing the tampon blank to form a substantially cylindrical, compressed tampon having a cover comprising the individual sheet.

22. The method of claim 21 wherein the attachment step comprises adhering the individual sheet to the absorbent sliver.

23. The method of claim 21 wherein the attachment step comprises heat sealing the individual sheet to the ~~absorbent sliver~~.